

## Product datasheet for **TP301089**

### valyl tRNA synthetase (VARS) (NM\_006295) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human valyl-tRNA synthetase (VARS), nuclear gene encoding mitochondrial protein, 20 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA** >RC201089 protein sequence

**Clone or AA** **Red**=Cloning site **Green**=Tags(s)

**Sequence:**

MSTLYVSPHPDAFPSLRALIAARYGEAGEGPGWGGAHPRICLQPPPTSRTSFPPRLPALEQGPGGGLWWV  
GATAVAQLLWPAGLGGPGGSRAAVLVQQWVSADTELIPAAACGATLPALGLRSSAQDPQAVLGALGRALS  
PLEEWLRLHTYLAGEAPTLADLA AVTALLLPFRYVLDPPARRIWNVTRWFVTCVRQPEFRAVLGEVVLV  
SGARPLSHQPGPEAPALPKTAAQLKKEAKKREKLEKFQKQKIQQQQPPPGKEKKPKPEKREKRDGPVITY  
DLPTPPGEKKDVSGPMPDSYSPRYVEAAWYPWWEQQGFFKPEYGRPNVSAANPRGVFMMCI PPPNVTGSL  
HLGHALTNAIQDSLTRWHRMRGETTLWNPGCDHAGIATQVVVEKKLWREQGLSRHQLGREAFLEQVWKWK  
EEKGDRIYHQLKKGSSLDWDRACFTMDPKLSAAVTEAFVRLHEEGIIYRSTRLVNWSCTLNSAISDIEV  
DKKELTGRTLLSVPGYKEKVEFGVLVSFAYKVQGSDSDEEVVATTRIETMLGDVAVAVHPKDTRYQHLK  
GKNVIHPFLSRSLPIVFDEFVDMDFGTGAVKITPAHDQNDYEVGQRHGLEAISIMDSRGALINVPPFLG  
LPRFEARKAVLVALKERGLFRGIEDNPMVVPLCNRSKDVEPLL RPQWYVRCGEMAQAASAAVTRGDLRI  
LPEAHQRTWHAWMDNIREWCISRQLWWGHRIPAYFVTVSDPAVPPGEDPDGRYWVSGRNEAEAREKAAKE  
FGVSPDKISLQQDEVDLDTWFSSGLFPLSILGWPNQSEDLSVFYPGTLLTGHDLFFWVARMVMLGLKL  
TGRLPFREVYLHAIVRDAHGRKMSKSLGNVIDPLDVIYGISLQGLHNQLLNSNLDPSEVEKAKEGQKADF  
PAGIPECGTDALRFGLCAYMSQGRDINLDVNRILGYRHFCNKLWNATKFALRGLGKGFVPSPTSQPGGHE  
SLVDRWIRSRLTEAVRLSNQGFQAYDFPAVTTAQYSFWLYELCDVYLECLKPVLNGVDQVAAECARQTLV  
TCLDVGLRLLSPFMPFVTEELFQRLPRRMPQAPPSLCVTPYPEPSECSWKDPEAAALELALSITRAVRS  
LRADYNLTRIRPDCFLEVADEATGALASAVSGYVQALASAGVVAVLALGAPAPQGC AVALASDRCSIHLQ  
LQGLVDPARELGKLQAKRVEAQRQAQRLRERRAASGYPVKVPLEVQEAD EAKLQQTEAELRKVDEAIALF  
QKML

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

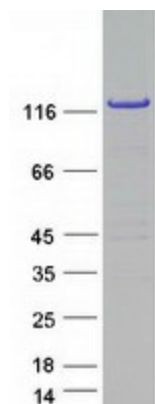
**Tag:** C-Myc/DDK

**Predicted MW:** 140.3 kDa



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<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<u>NP_006286</u>
<b>Locus ID:</b>	7407
<b>UniProt ID:</b>	<u>P26640, A0A024RCN6</u>
<b>RefSeq Size:</b>	4308
<b>Cytogenetics:</b>	6p21.33
<b>RefSeq ORF:</b>	3792
<b>Synonyms:</b>	G7A; NDMSCA; VARS; VARS2
<b>Summary:</b>	Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. The protein encoded by this gene belongs to class-I aminoacyl-tRNA synthetase family and is located in the class III region of the major histocompatibility complex. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis

**Product images:**

Coomassie blue staining of purified VARS protein (Cat# TP301089). The protein was produced from HEK293T cells transfected with VARS cDNA clone (Cat# [RC201089]) using MegaTran 2.0 (Cat# [TT210002]).